

atggcttcctcagttctttcctctgcagcagttgccacccgcagcaatgttgctcaagct
M A S S V L S S A A V A T R S N V A Q A
aacatgggtgcacctttcactggccttaagtcagctgcctcattccctgtttcaaggaag
N M V A P F T G L K S A A S F P V S R K
caaaaccttgacatcacttccattgccagcaacggcggaagagtgcaatgcatgcaggtg
Q N L D I T S I A S N G G R V Q C M Q V
tggccaccaattaacaagaagtcc (SEQ ID NO:3)
W P P I N K K S (SEQ ID NO:4)

Figure 1

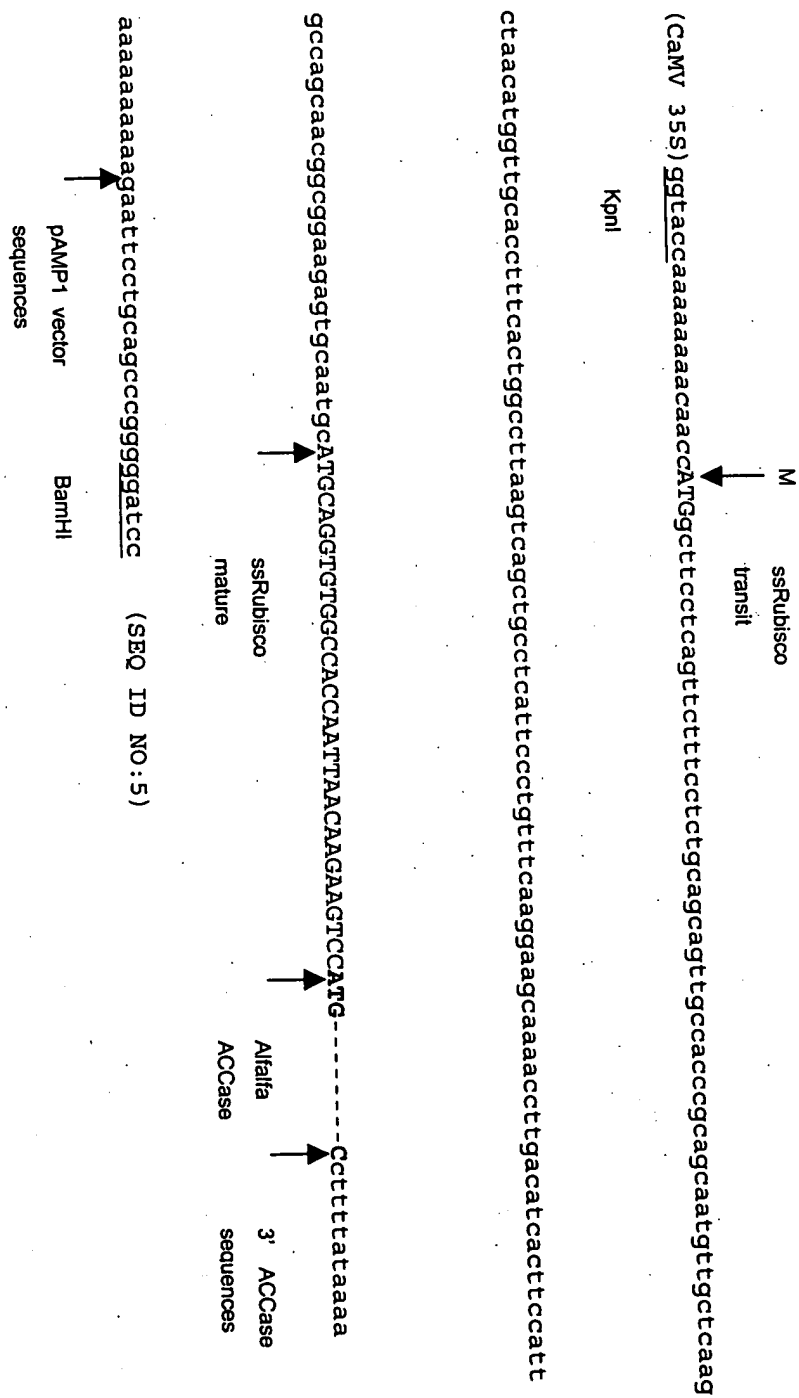


Figure 2



Figure 3

atggctagcgtgggcccgtggaaatggatattttaacagtggtgctaccgagtaggcaccctgctactacaaccgaa
M A S V G R G N G Y L N S V L P S R H P A T T T E
gtagatgaatactgcaatgcccttgaggaaacaagccgattcatagcatattgattgcaaacaatggaatggca
V D E Y C N A L G G N K P I H S I L I A N N G M A
gcagtcaagttttatacgtagtgttaggagttgggcttacgagacatttggcacggaaaaagctatcttgttggtt
A V K F I R S V R S W A Y E T F G T E K A I L L V
gccatggcaactccagaggatatgagaatcaatgcagaacatatcagaatagccgatcaatttgtggaagtacct
A M A T P E D M R I N A E H I R I A D Q F V E V P
gtggggaccaataacaataactacgccaatgtgcagcttattctagagattgctgagataactcacgttgatgcg
G G T N N N N Y A N V Q L I L E I A E I T H V D A
gtgtggcctggttggggtcatgcatcagaaaaatcctgagcttccagatgcattaaaagcaaaggggaattgtattc
V W P G W G H A S E N P E L P D A L K A K G I V F
cttggacctcctgctatatctatggcagcattgggagacaaaattgggtcctcgttgattgctcaggcagcagaa
L G P P A I S M A A L G D K I G S S L I A Q A A E
gttccaacccttccatggagtggttctcatgtgaaaattcctccagaaagtgaacttgattactattcctgatgaa
V P T L P W S G S H V K I P P E S D L I T I P D E
atttaccgtgcagcatgtgtttatacaacagaagaagcaattgcaagttgtcaagtagtaggttaccctgcaatg
I Y R A A C V Y T T E E A I A S C Q V V G Y P A M
attaaggcatcttggggtggtggcggaaggaaggttcataatgatgatgaggttagggcattgttc
I K A S W G G G G K G I R K V H N D D E V R A L F
aagcaagttcaaggtgaagtaccaggctcacctatatttataatgaaagttgcttcccagagccgacatcttgaa
K Q V Q G E V P G S P I F I M K V A S Q S R H L E
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V Q L I C D Q H G N F A A L H S R D C S V Q R R H
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Q K I I E E G P I T V A P P E T V K E L E Q A A R
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R L A K S V N Y V G A A T V E Y L Y S M E T G E Y
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Y F L E L N P R L Q V E H P V T E W I A E I N L P
gcagcacaagttgcagttgggatgggcatcccactctggcaaattcctgagattaggcggtttctatgggatggaa
A A Q V A V G M G I P L W Q I P E I R R F Y G M E
catggtgggggaaatgatggttgaagaaaacatcagtggttagctacccttttgattttgacgaagcacaatct
H G G G N D G W K K T S V L A T P F D F D E A Q S

Figure 4-1

acaaagccgaaaggtcattgtgtggctgtacgagtcaccagtgaggaccccgatgatgggttttacgcctacagga
T K P K G H C V A V R V T S E D P D D G F T P T G
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G K V Q E L S F K S K P N V W A Y F S V K S G G G
attcatgaattctcagattctcaatttgacatgttttgcgtttggagaatctagagcttttagcaattgcaa
I H E F S D S Q F G H V F A F G E S R A L A I A N
atgggtactggggttgaaggaaattcaaattcgaggagaaattcgtagaccaacgttgattacacaattgatcttctg
M V L G L K E I Q I R G E I R T N V D Y T I D L L
aatgcttcagactacagagacaacaaaattcacacaggatggctagacagtagaattgcaatgctgggttagagca
N A S D Y R D N K I H T G W L D S R I A M R V R A
gagaggcctccctgggtatctgtctgttgttgggtggggcactctataaagcttctgccagcagtgagcttttagt
E R P P W Y L S V V G G A L Y K A S A S S A A L V
tcggactatgttggctatcttgaaaaggggcaaattccctcccaagcacatttctctgtccattctcaagtttct
S D Y V G Y L E K G Q I P P K H I S L V H S Q V S
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L S I E G S K Y T I D M V R G G P G S Y K L K L N
caatcgagatagaagcgagatacacactttacgtgatggaggtttgctaattgcagttggatggaaacagtc
Q S E I E A E I H T L R D G G L L M Q L D G N S H
gtaatatatgcagaggaagaagcagctggaactcggcttttaatatagatggaaggacttgcttgcttcagaatgat
V I Y A E E E A A G T R L L I D G R T C L L Q N D
gacgatccatcaaagttaattggagagacaccggtgcaagcttctgagatatttggttgcggatgatagtcagatt
D D P S K L I G E T P C K L L R Y L V A D D S Q I
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D A D T P Y A E V E V M K M C M P L L S P A S G I
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I H F R M A E G Q A M Q A G E L I A K L D L D D G
tctgcagtaaggaaggcagaacccttcactgggagcttccctatcctgggcccctcctactgcaatttcaggtaaa
S A V R K A E P F T G S F P I L G P P T A I S G K
gttcatcagaaatgtgcagcaagctttaaagcgtgcacggatgattcttgcgtggctatgagcacaacattgatgaa
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gttgcgtggtcaaaagtttgcctcaattgccttgacagccctgaactgcctttccttcaatggcaagagtgccttgca
V V V K S L L N C L D S P E L P F L Q W Q E C F A
gttttggcaaccogtcttcccaaagatcttagaaaacgagttggaagctaaatataaggagttcgaaattatttca
V L A T R L P K D L R N E L E A K Y K E F E I I S

Figure 4-2

agctcccaaactattgatttccttgccaaattattgaaggcaatccttgaagctcatctttcctcctgtcctgaa
S S Q T I D F P A K L L K A I L E A H L S S C P E
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N E K G A L E R L V E P L T S L V K S Y E G G R E
agccatgctcataaaattgttcaatctctatttgaagagtatctttcagttgaagaactattcagtgataatata
S H A H K I V Q S L F E E Y L S V E E L F S D N I
caggctgatgtaattgaacgactccgtcttcaatacaagaaagatttggtgaagattgtagatattgtgctctct
Q A D V I E R L R L Q Y K K D L L K I V D I V L S
catcaggggtgtcaagagcaaaaaacaagctgatactgcgactaatggataaactggtttaccctaatacctgctgcc
H Q G V K S K N K L I L R L M D K L V Y P N P A A
tatagggatcaattaatccgattctcccaactcaaccatatagtttattctgagttggctcttaaggcaagtcaa
Y R D Q L I R F S Q L N H I V Y S E L A L K A S Q
ctgttggagcaaaactaaactcagtgaaacttcgatccagcattgctagaagtctttctgaactagaaatgtttacc
L L E Q T K L S E L R S S I A R S L S E L E M F T
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M H I G L V G I N N Q M S L L Q D S G D E D Q A Q
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E R I D K L A K I L R E Q E I G S I I H A A G V G
gatattagctgtatcatacagaggggatgaagggcgtgctccaatgaggcattcctttcactggctcatctgaaaag
D I S C I I Q R D E G R A P M R H S F H W S S E K
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L Y Y V E E P L L L H L E P P L S I Y L E L D K L

Figure 4-3

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ccacaaccaattcaaagaatgtttcttcgaacacttatcagacagccaaccacaaatgaaggatactcttcttat
P Q P I Q R M F L R T L I R Q P T T N E G Y S S Y
caaagactggatgcagaaacgtcccgtacccaattggctatgtcttatacttcaaggagcatttttaggtcccta
Q R L D A E T S R T Q L A M S Y T S R S I F R S L
atgggcgcaatggaggagttggaacttaactcacacaataccaccatcaaactctgaacatgctcatatgtacctc
M G A M E E L E L N S H N T T I K S E H A H M Y L
tatatcatacgcgagcagcaaatagatgatcttgtgccttattccaagaaaattaacatagaagctggccaagaa
Y I I R E Q Q I D D L V P Y S K K I N I E A G Q E
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E T T V E A I L E E L A Q E I H S S V G V R M H R
ttaggcgttttcgtgtgggaaatcaagctctggattacagcatgtggacaggcaaattggtgcttgagggtcatt
L G V F V W E I K L W I T A C G Q A N G A W R V I
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V N N V T G H T C T V H I Y R E M E D A T T H K V
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E D Y A R I G S S V M A H E L K L E S G E T R W V

Figure 4-4

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 ggtggtgcacttcccattgtaaagcccccttgatccccagagaggggaagtggagtatttaccggaaaattcatgc
 G G A L P I V K P L D P P E R E V E Y L P E N S C
 gatcctcgctgctgccatttccggaactctggatgttaatggaaagtggctgggaggcatttttgacaaggacagc
 D P R A A I S G T L D V N G K W L G G I F D K D S
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 agagaagaactcccacttttcattatcgcaaactggagaggcttttcagggtggacaaagggacctttttgaagga
 R E E L P L F I I A N W R G F S G G Q R D L F E G
 attcttcaggctggttcgactattgtggagaaccttaggacatacaaacagcccatatttgtatacattccaatg
 I L Q A G S T I V E N L R T Y K Q P I F V Y I P M
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 E R T A K G N V L E P E G M I E I K F R T R E L L
 gagtgatatgagaagacttgatcaacaattgattaatttgaaggaaaaactttctgaagccaagagtaacaaggac
 E C M R R L D Q Q L I N L K E K L S E A K S N K D
 tatggtgcatatgattctctgcagcagcagattagattccgtgagaaacagcttttgcctttgtatactcagata
 Y G A Y D S L Q Q Q I R F R E K Q L L P L Y T Q I
 gctacaaaatttgcgtgaactccatgatacttcattaagaatgaaagcaaagggtgtaatcagagaagttcttgat
 A T K F A E L H D T S L R M K A K G V I R E V L D

Figure 4-5

tggcgtaagtgcggttctgtcttctatcagagactgcacaggagaatcggtgagcactcactgatcaacatcggtg
W R K S R S V F Y Q R L H R R I G E H S L I N I V
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R D A A G D Q L S Y V S A M N L L K E W Y L N S D
atcgccaaaggtagagaagatgcttggttgacgatgaagccttcttcagatggagggatgatccagcaaactac
I A K G R E D A W L D D E A F F R W R D D P A N Y
gaggataaactaaaggaattgcgctccagagactgttgcttcagttgacaaatattggcgactcggctctagat
E D K L K E L R V Q R L L L Q L T N I G D S A L D
ttacaagctctacctcaaggtcttgccgcccttttaagcaagttggaagcatcaagtcgcgataagttgatcagt
L Q A L P Q G L A A L L S K L E A S S R D K L I S
gaacttcgcaaagtaactcggttagtagacagtgaatgctcctgtgatctgccatgcactcatgttgtagtggtc
E L R K V L G (SEQ ID NO:8)
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gatcataaccagcatcaccatgtttggtctatttatttgctgggtgattgattctttgcgtgtatctgaataaac
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aagaattcctgcagcccggggatcc (SEQ ID NO:7)

Figure 4-6